**WHAT IS CLAIMED IS:**

1. An ad device, comprising:

a plurality of flaps, each of said flaps comprising a first face, a second face, and a first support supporting a turn of each said flap, wherein said first face, said second face and said first support make an isosceles triangle shape in a plane view, said first support having a first step and a second step to receive edges of neighboring flaps;

a plurality of hinge axes, each of said plurality of hinge axes coupled to each of said first supports;

a plurality of first pinions, each of said first pinions mounted on each of said hinge axes; and

a rack engaged with said plurality of first pinions, each of said plurality of flaps turning on each of said hinge axes according to a movement of said rack, whereby said first and second faces can be alternately exposed to an outside according to a position of said rack.

2. The ad device of claim 1, wherein said rack is a mass body in a stick form.

3. The ad device of claim 1, further comprising:

a couple of first magnets mounted on both ends of said rack; and

a couple of second magnets fixed to said ad device in a position corresponding to said couple of first magnets, whereby said first magnets and said second magnets are coupled to each other to prevent a movement of said plurality of flaps as soon as said plurality of flaps finish turning.

4. The ad device of claim 1, further comprising:

a second support mounted between said plurality of first pinions and said plurality of flaps, said second support having a plurality of said thrust bearings, each of said hinge axes passing through each of said thrust bearings; and

a plurality of rolling bearings mounted on the bottom of said rack.

5. The ad device of claim 1, wherein said rack is a chain type transmitting rack having teeth on an inner part of said rack.

6. The ad device of claim 5, further comprising:

a motor; and

a second pinion coupled to said motor, said second pinion engaged with said teeth of said rack to transfer a driving force of said motor to said plurality of flaps through said rack and said first pinions.

7 The ad device of claim 6, further comprising:

a controller controlling said motor.

8. The ad device of claim 7, wherein said motor is a static driving motor.

9. The ad device of claim 6, further comprising a board attached on said ad device, wherein said turn of said flaps comes to a standstill at three positions including a first position to show said first face, a second position to show said second face and a third position to show said board.

10. The ad device of claim 9, further comprising a controller to control said motor.

11. The ad device of claim 10, wherein said controller controls said motor to periodically show one of said first face, said board and said second face.

12. The ad device of claim 5, wherein said rack is made of rubber.

13. An ad device, comprising:

a frame;

a changing board comprising a plurality of flaps mounted in said frame, each of said flaps comprising a first face, a second face, and a first support supporting a rotation of said flap, said first face, said second face and said first support making an isosceles triangle shape in a plane view, said each flap being able to rotate a full half circle, said first support having a first step and a second step receiving edges of neighboring flaps to make an exposed surface of said changing board flat;

a plurality of hinge axes, each of said plurality of hinge axes coupled to each of said first supports;

a plurality of first pinions, each of said first pinions mounted on each of said hinge axes;

a rack engaged with said plurality of first pinions, said each flap rotating on each of said hinge axes according to a movement of said rack;

a couple of first magnets mounted on both ends of said rack; and

a couple of second magnets fixed to said frame in a position corresponding to said couple of first magnets, whereby said first magnets and said second magnets are coupled to each other to prevent a movement of said plurality of flaps as soon as said plurality of flaps finish rotating.

14. The device in claim 13, wherein said rack is a mass body in a stick form.

15. The ad device of claim 13, further comprising:

a second support mounted between said plurality of first pinions and said plurality of flaps, said second support having a plurality of thrust bearings, each of said hinge axes passing through each of said thrust bearings; and

a plurality of rolling bearings mounted on the bottom of said rack.

16. An ad device, comprising:

a frame;

a changing board comprising a plurality of flaps mounted in said frame, each of said flaps comprising a first face, a second face, and a first support supporting a rotation of said flap, said first face, said second face and said first support making an isosceles triangle shape in a plane view, said

each flap being able to rotate a full half circle, said first support having a first step and a second step receiving edges of neighboring flaps to make an exposed surface of said changing board flat;

a plurality of hinge axes, each of said plurality of hinge axes coupled to each of said first supports;

a plurality of first pinions, each of said first pinions coupled to each of said hinge axes;

a rack having teeth on an inner side of said rack, said teeth engaged with said plurality of first pinions, each of said plurality of flaps rotating on each of said hinge axes according to a movement of said rack;

a second pinion engaged with said teeth of said rack;

a motor coupled to said second pinion, whereby a driving force of said motor is transferred to said first pinions through said second pinion and said rack to rotate said plurality of flaps; and

a board mounted within an frame, wherein said flaps come to a standstill at positions comprising a first position to show said first face, a second position to show said second face, and a third position to show said board.

17. The ad device of claim 16, further comprising:

a controller controlling said motor.

18. The ad device of claim 17, wherein said controller controls said motor to periodically show one of said first face, said billboard, and said second face.

19. The ad device of claim 18, wherein said rack is made of rubber.